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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,236	01/29/2002	Akira Murakami	330-243	2265

23117 7590 08/19/2005

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EXAMINER

LOPEZ, CARLOS N

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/058,236

Applicant(s)

MURAKAMI, AKIRA

Examiner

Carlos Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Response to Amendment

The amendment filed on 5/27/05 has been entered. The previously discussed amendment to change the instant claims to read "mold members and parts" will not be entered after further consideration. A new rejection of the claims pending claims follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1) Claims 1, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al (JP 63-265833). Inoue discloses a method for producing substrate blank. As shown in figure 2 of Inoue, a glass substrate 14, in a softened state, is manufactured by a pressing molding method. The method comprises an upper mold 11 and lower mold 12 having the glass substrate being pressed in between the two molds. The surrounding edge portion of the substrate 14 is free as shown in figure 2, since the surrounding edge does not come in contact with any mold surface or mold part and thus not having surface marks on the surrounding edge.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claims 2-3, and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (JP 63-265833) in view of Murakami et al JP 10-236831 (for which US 6,442,975 is taken as the JP equivalent). Inoue is silent disclosing a substrate blank having a flat front and reverse sides. However, the shape of the substrate would depend on its intended use. As shown by Murakami, glass blanks having a flat front surface are used as substrates for a recording medium. Hence, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to form the glass substrate of Inoue with a flat front and reverse surfaces in order to use the glass substrate as a recording medium. Hence, the claimed positive active steps to form glass substrates with varying shapes is only indicative of the intended use of the glass substrate merely varying the shape of the mold but performing the active steps claimed.

As for claim 2, the claimed flat front surface, reverse surface and a surface formed of the surrounding edge portion is deemed respectively as the top surface, bottom surface and edges surface the Murakami's glass blank 44.

As for claim 3, Murakami teaches that the glass substrate blank 44 has a thickness greater than the final product, which is the claimed glass substrate (Col. 15, lines 59-60).

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As for claim 6, the soften glass is supplied to the lower mold as shown in figure 7A.

As for claim 7, the molds have a temperature of 250-450 degrees Celsius for the upper mold and the lower mold having a temperature 50 to 100 degrees lower than the upper mold wherein the temperature of the softened glass is 1200 degree Celsius (Col 10, lines 50ff).

As for claims 8-9, the glass is pressed molded to have a disk shape with a thickness of 2-4 mm (Murakami Col. 2 lines 64ff). As shown in figure 10 the circumferential edge of glass blank 44 does not touch the mold dies 17 and 14 as it is being pressed formed.

3) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (JP 63-265833) in view of Suzuki (JP 10-194760). Inoue is silent disclosing the claimed large and small thickness portion. However, Suzuki figures 2 and 7 show a thicker portion at the middle and edges of a substrate blank eliminate warpage of a press formed glass. Hence, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have provided a substrate blank having a thicker portion at the middle and edges of Inoue's glass blank as taught by Suzuki in order to eliminate warpage

4) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (JP 63-265833) in view of Murakami et al JP 10-236831 (for which US 6,442,975 is

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taken as the JP equivalent) as applied to claim 3 above and in further view of Suzuki (JP 10-194760). Inoue is silent disclosing a substrate blank having the claimed small and large thickness portions recited in claim 5. However, Enomoto teaches that glass substrates having the claimed large and small portions as recited in claim 5 prolongs the service life of the molds, shorten process time and provides a glass substrate with excellent shape accuracy. Hence, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to form the glass substrate of Inoue with the claimed small and large portions as taught by Enomoto in order to prolong the service life of the dies, shorten process time and provide a glass substrate with excellent shape accuracy.

5) Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (JP 63-265833) in view of Murakami et al JP 10-236831 (for which US 6,442,975 is taken as the JP equivalent): Murakami teaches that the glass blank may be grinded and polished (Col. 7, lines 19ff). However, Murakami is silent on cutting the glass blank. The Murakami method is for the production of a recording medium such as a CD. Since CDs currently have a hole at the center it would be obvious to a person of ordinary skill in the art at the time the invention was made that a cut would be expected on the glass blank disc in order to form the hole of an information recording medium CD.

As for claim 12, Murakami teaches of using crystallized glass as the glass substrate, see col. 7-8, and hence would require a heat treatment.

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In regards to claim 13's limitation of forming an information layer on the substrate, Murakami teaches of laminating a magnetic layer on the substrate (Col. 7, line 57ff).

Response to Arguments

Applicant's arguments filed 5/27/05 have been fully considered but they are not persuasive.

Applicant argues that Inoue's circumference of the glass blank comes in contact elements 14 and 15. However, element 14 is the glass blank itself and element 15 is the supporting member holding the glass blank which as explicitly shown in figure 2 does not contact the circumference of the glass blank.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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